

United States Patent and Trademark Office

MENT OF COMMERC

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/852,348	05/09/2001	Lutz Richter	A-2829	4692
24131 75	90 06/01/2005		EXAM	INER
LERNER AND GREENBERG, PA			WEEKS, GLORIA R	
P O BOX 2480 HOLLYWOOD, FL 33022-2480			ART UNIT	PAPER NUMBER
	,		3721	

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		(//
	Application No.	Applicant(s)
	09/852,348	RICHTER ET AL.
Office Action Summary	Examiner	Art Unit
·	Gloria R. Weeks	3721
The MAILING DATE of this communication Period for Reply	appears on the cover sheet wit	h the correspondence address
A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, a - If NO period for reply is specified above, the maximum statutory per - Failure to reply within the set or extended period for reply will, by standard processed by the Office later than three months after the meanned patent term adjustment. See 37 CFR 1.704(b).	N. R 1.136(a). In no event, however, may a re reply within the statutory minimum of thirty riod will apply and will expire SIX (6) MONT atute, cause the application to become AB/	ply be timely filed (30) days will be considered timely. HIS from the mailing date of this communication. ANDONED (35 U.S.C. & 133).
Status		
1) Responsive to communication(s) filed on 0	7 April 2005.	
	his action is non-final.	
3) Since this application is in condition for allo closed in accordance with the practice under 3)		
Disposition of Claims	or Exparte Quayre, 1999 C.D.	11, 400 0.0. 210.
	a in the application	
 4)		
5) Claim(s) is/are allowed.		
6) Claim(s) <u>6,8,10-12,14 and 20-25</u> is/are reje	cted.	
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction an	d/or election requirement.	
Application Papers		
9)☐ The specification is objected to by the Exam	iner.	
10)☐ The drawing(s) filed on is/are: a)☐ a	accepted or b) objected to b	y the Examiner.
Applicant may not request that any objection to	the drawing(s) be held in abeyand	ce. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the con		
11)☐ The oath or declaration is objected to by the	Examiner. Note the attached	Office Action or form PTO-152.
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for fore	ign priority under 35 U.S.C. §	119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:		
1. Certified copies of the priority docume		·
2. Certified copies of the priority docume		
3. Copies of the certified copies of the p		eceived in this National Stage
application from the International Bur * See the attached detailed Office action for a		and the state of
See the attached detailed Office action for a	ist of the certified copies not r	eceivea.
Attachment(s)		
Notice of References Cited (PTO-892)	4) 🔲 Interview Su	ımmarv (PTO-413)
2) Dotice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s).	/Mail Date
 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/ Paper No(s)/Mail Date 	08) 5)	ormal Patent Application (PTO-152)
	o) ouler	- •

Application/Control Number: 09/852,348

Art Unit: 3721

DETAILED ACTION

1. Applicant's arguments filed April 7, 2005 have been fully considered but they are not persuasive. Thus, claims 6, 8, 10-12, 14 and 20-25 stand rejected as follows.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 6, 12, 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boss et al. (USPN 6,142,353) in view of Raffoni (USPN 6,220,494).

In reference to claims 6, 12, 20-23, Boss et al. discloses a gathering stapler comprising: a plurality of cooperating subassemblies including an operatively revolving endless chain (6) having a conveying strand running in a conveying direction (63) at a certain speed and conveying gathered folded sheets (11); a stapling carriage (15) attached to the conveying strand (via 29) and operatively oscillating in parallel with the conveying strand for running in synchronicity with the conveying strand in the conveying direction with certain time segments (column 3, lines 15-21); stapling heads (16) mounted to the stapling carriage (15) and adapted for ejecting staples; a stapling displacement (column 4, lines 31-37) configuration adapted for activating the stapling heads for ejecting staples; a delivery (10); an ejector (column 3, lines 9-14); and a plurality of subassembly drives (12, 14, 39). Boss et al. does not disclose a motor for separately controlling at least some of the subassemblies.

Application/Control Number: 09/852,348

Art Unit: 3721

Raffoni teaches a fastening device comprising a plurality of subassemblies including: a delivery conveyor (2); a guide rail (13); a stapling carriage (25, 26); stapling head and displacement configuration (31, 38) mounted to the stapling carriage (25, 26); an ejector (conveyor downstream of 2); the subassemblies running in continuous operation (cycle); and a plurality of subassembly drives (17, 28, 37, 35, 39) managed by a central control device (control box adjacent delivery conveyor, wherein the drives for the subassemblies are motors such that the stapling heads and displacement configurations (31, 38) are controlled by a motor (35, 39) and the stapling carriages (25, 26) are controlled by a motor (28, 37). It would have been obvious to one having ordinary skill in the art to modify the single drive system of Boss et al. to include the multiple drive system of Raffoni for the purpose of offering the capability of individual adjustment (Raffoni-column 7, lines 60-64).

Although Raffoni does not specifically disclose the use of a motor to actuate the conveyor (111), it would have been obvious to one having ordinary skill in the art at the time the invention was made to actuate the conveyor using a motor since Examiner takes Official Notice that the use of motors to power an endless conveyor was well known for the purpose of automation.

4. Claims 8, 10, 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boss et al. (USPN 6,142,353) in view of Raffoni (USPN 6,220,494) as applied to claim 20 above, and further in view of Dunn (5,816,467).

Regarding claims 8, 10 and 11, Boss et al. in view of Raffoni discloses a stapling apparatus having subassemblies controlled by individual motors, the control means for the motors being a central control device. However, the control device is not specifically disclosed

as being a programmable computer. Dunn teaches a stapling apparatus comprising a delivery conveyor (111) having an independent drive system, which is synchronized with the drive system of a stapling carriage (116) and a stapling displacement configuration (117), the drive systems being centrally controlled by a programmable computer (121; column 3 lines 16-39). It would have been obvious to one having ordinary skills in the art at the time of the invention to replace the control device of Boss et al. in view of Raffoni with the programmable computer of Dunn for the purpose of eliminating manual operation of the stapling device in response to required adjustments to the subassemblies of the stapling apparatus (Dunn-column 2 lines 10-23).

In reference to claim 14, Boss et al. in view of Raffoni and Dunn discloses a gathering stapler controlled by a computer, but does not disclose the external composition of the computer. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a computer having a display device since Examiner takes Official Notice that programmable computers are known to include a display device and an operating panel.

5. Claims 21, 22, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boss et al. (USPN 6,142,353) in view of Dunn (5,816,467).

With respect to claims 21, 22, 24 and 25, Boss et al. discloses a gathering stapler apparatus having a single drive system divided in to a first and second sub-drive assembly.

Dunn teaches a stapling apparatus comprising an endless delivery conveyor (111) having a drive system separate from the drive system of a stapling carriage (116) and stapling displacement configuration (117), wherein the conveyor (111) is driven without interruption, while the stapling carriage (116) and stapling head (117) are capable of adjustment in paths parallel to the travel

Art Unit: 3721

path of the conveyor (111; column 3 lines 25-40). The adjustments of the stapling carriage (116) and stapling head (117) are made in response to a conveyor speed sensor (122). Although Dunn does not specifically disclose the use of motors to actuate the independent drive systems of the conveyor (111), stapling carriage (116) and stapling head (117), it would have been obvious to one having ordinary skill in the art at the time the invention was made to actuate the drive systems using a motor since Examiner takes Official Notice that the use of motors to power an endless conveyor and robotic structure (stapling carriage and stapling head) was well known for the purpose of automation.

Response to Arguments

6. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that references cannot be arbitrarily combined an that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures.

In this case, both Boss et al. and Raffoni disclose fastening devices comprising multiple subassemblies. Although the subassemblies do not operate identically, the same functions are executed (e.g. an object is fastened to another while being transported along a conveying line). The idea of synchronizing a plurality of drives controlling various subassemblies of a fastening

Application/Control Number: 09/852,348

Art Unit: 3721

device is clearly shown by Raffoni, despite his lack of expressly articulating such a teaching. If the drives of Raffoni were not synchronized to some degree, the device would be ineffective.

The fact that the fastening device of both Boss et al. and Applicant's invention are known to one of ordinary skill in the art to operate at speeds significantly greater than the fastening device of Raffoni, does not eliminate Raffoni's basic teaching of suggestion to synchronize multiple drives of subassemblies.

Boss et al. discloses the structural limitations of Applicant's invention, regarding the provision of a gathering stapler comprising the following subassemblies: an oscillating stapling carriage (15) attached to a conveying strand (via 29); stapling heads (16); a stapling displacement configuration adapted; a delivery (10); and an oscillating ejector (column 3, lines 9-14). However, Boss et al. does not disclose multiple motor driven drives for a plurality of the subassemblies, which is why Examiner has relied upon Raffoni, which teaches the idea of using separate motors to drive multiple subassemblies of a fastening device.

Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 3721

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gloria R. Weeks whose telephone number is (571) 272-4473. The examiner can normally be reached on 8:30 am - 7:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gloria R Weeks Examiner Art Unit 3721

grw May 25, 2005

> SCOTT A. SMITH PRIMARY EXAMINER